### Part 5

# Science, Technology and Research

## **UN Environment Program**

The UN Environment Program (UNEP) is the UN's principal environment organization, responsible for catalyzing action on global environmental problems. UNEP also supports the collection, assessment and dissemination of environmentally related information.

UNEP has faltered in recent years. Though the United States increased its contribution in 1997 (compared to 1996), generally reduced revenues continued to affect the organization's ability to carry out its programs. Nonetheless, encouraging signs were apparent. The 19th Governing Council adopted a focused mandate, the Nairobi Declaration, which clearly sets forth organizational priorities. It also created a new entity, the High-level Committee of Ministers and other Officials (HLC), which provides environmental ministers the opportunity to shape UNEP programs and policies. The HLC held its initial meeting in June 1997, and endorsed a broad agenda of reform. Finally, in December, Klaus Toepfer, a reform-minded former German Minister of Environment, was selected as UNEP's new Executive Director.

UNEP continued to make progress on key issues of importance to the United States. It supported the implementation of various international agreements such as the Basel Convention on trade in hazardous wastes; the Vienna Convention and Montreal Protocol to reduce the use of ozone-depleting substances; the Biodiversity Convention to protect against species loss; and the Convention to Combat Desertification and Climate Change. UNEP also continued its work through the regional seas program to implement the Global Program of Action for the Protection of the Marine Environment from Land-based Activities. Finally, UNEP was instrumental in promoting international chemicals negotiations, and is launching an effort to limit certain hazardous chemicals and pesticides.

The United States continued its support for UNEP's scientific monitoring and assessment, Earthwatch, through participation in several of its programs, in particular, the Global Resource Information Database (GRID), the Global Environmental Monitoring System (GEMS) and the environmental information retrieval system (INFOTERRA).

#### **Protection of World Climate**

The parties to the UN Framework Convention on Climate Change (FCCC), which entered into force in March 1994, continued their efforts to strengthen the global response to the threat of climate change. Over 160 nations have ratified the convention and participate in the negotiations. Negotiations to address action in the post-2000 period were inaugurated at the first Conference of the Parties (COP) in Berlin in 1995, and culminated in the adoption of the Kyoto Protocol in December 1997.

With the ultimate objective of stabilizing atmospheric concentrations of greenhouse gases at a level that would prevent dangerous anthropogenic interference with the climate system, the developed nations, as a whole, agreed to reduce emissions by approximately 5.2 percent below 1990 levels. The United States will limit its greenhouse gas emissions, during the period 2008–2012, to seven percent below base year levels. Other developed countries committed to similar targets. Reductions will be accomplished according to national circumstances. Flexibility is provided through international emissions trading, joint implementation among developed countries and a Clean Development Mechanism involving project activities in developing countries.

Developing countries have taken further steps by agreeing to formulate more detailed national climate change programs and international reports. They also may participate in the Clean Development Mechanism, through which they may receive investment resources for projects which reduce emissions, and in turn "sell" those reductions to investors with emission commitments.

Several important issues remain to be decided or refined by COP-4, to be held in November 1998 in Buenos Aires. They include: progress in establishing rules for international emissions trading, the crediting of climate-friendly investments in developing countries toward emissions reductions and the treatment of carbon "sinks."

Work also continued in the Intergovernmental Panel on Climate Change (IPCC), most particularly on procedural and technical matters. The 13th plenary was held in the Maldives in September 1997. Planning took place to launch the IPCC's third assessment report. The IPCC also contributed to international negotiations through preparation of several technical and special reports.

# **UN Scientific Committee on the Effects of Atomic Radiation**

The UN Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) was established by the General Assembly in 1955 to provide continuous review and evaluation of the effects of ionizing radiation on humans and their environment. Radiation in this context covers both natural and man-made (i.e., from atmospheric and surface nuclear explosions,

environmental radiation, and medical and occupational exposures). The Committee receives, assembles and compiles reports and information furnished by its member states, members of the United Nations, specialized agencies, the IAEA and nongovernmental organizations on observed levels of ionizing radiation and on scientific observations and experiments relevant to the effects of ionizing radiation on people and the environment.

The 46th session of UNSCEAR met June 16–20 in Vienna, Austria. On the basis of documents prepared by the UNSCEAR Secretariat, the Committee reviewed and worked on the following documents: Natural Radiation Exposures, Exposures from Man-made Sources of Radiation, Medical Radiation Exposures, Occupational Radiation Exposures, Dose Assessment Methodologies, Epidemiological Evaluation of Radiation-induced Cancer, DNA Repair and Mutagenesis, Hereditary Effects of Radiation, Combined Effects of Radiation and Other Agents, Biological Effects of Low-level Radiation and Local Exposures and Effects from the Chernobyl Accident.

On December 10 the UN General Assembly adopted resolution 52/55, entitled "Effects of Atomic Radiation," without a vote. Operative paragraph nine of the resolution

... invites the International Atomic Energy Agency and the World Health Organization to consider the functions and role of UNSCEAR and submit a recommendation to the General assembly at its 53rd session.

United States Participation in the United Nations